



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,901	08/21/2003	Seung-Chul Park	1293.1959	6424

21171 7590 03/20/2007
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

NEGRON, DANIEL L

ART UNIT	PAPER NUMBER
----------	--------------

2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/644,901

Applicant(s)

PARK ET AL.

Examiner

Daniell L. Negrón

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-11,13,16,20-23,25,26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4,6-11,13,16,20-23 and 25 is/are allowed.
- 6) ☒ Claim(s) 26 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Request for Continued Examination

1. Examiner acknowledges the request for continued examination (RCE) filed on December 29, 2006.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 26 and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 26 and 28 define a signal embodied in a carrier wave with descriptive material as defined in the specification on pages 10 and 11. While “functional descriptive material” may be claimed as a statutory product (i.e., a “manufacture”) when embodied on a tangible computer readable medium, a carrier wave (i.e., signal) embodying that same functional descriptive material is neither a process nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory classes of §101. Rather, “signal” is a form of energy, in the absence of any physical structure or tangible material.

Allowable Subject Matter

4. Claims 1, 3, 4, 6-11, 13, 16, 20-23, and 25 are allowed.
5. The following is an examiner’s statement of reasons for allowance:

Regarding claims 1, 3, 11, 13, 16, 20-23, and 25, claims 1, 11, 16, 21, and 23 disclose a method and corresponding apparatus for writing servo information on a disc in a disc drive,

Art Unit: 2627

comprising centering on a cylinder of the disc having skew '0', sequentially writing servo information toward the cylinder having skew '0' in a first radial direction of the disc, and sequentially writing the servo information toward the cylinder having skew '0' in a second radial direction of the disc, opposite the first direction; after the writing the servo information is completed, inspecting the servo information written in a cylinder at a predetermined distance from the cylinder having skew '0', and determining whether the servo information is correctly written, wherein if errors do not occur in the cylinder at the predetermined distance from the cylinder having skew '0', track-defect-processing all tracks within the predetermined distance from the cylinder having skew '0', such that a normal search operation cannot be performed, and if errors occur in the cylinder at the predetermined distance from the cylinder having skew '0', determining that all of the servo information is not correctly written, and writing the servo information for the entire disc again, which is neither disclosed or an obvious variation of the prior art.

Regarding claims 4 and 6, claim 4 discloses a method for writing servo information on a disc in a disc drive comprising sequentially writing information from a cylinder of the disc having a least number to a cylinder having skew '0', after writing the servo information to the cylinder having skew '0', moving a head to a cylinder having the largest number, sequentially writing the servo information from the cylinder having a largest number to a cylinder prior to the cylinder having skew '0', after writing all the servo information, inspecting the servo information written in a cylinder at a predetermined distance from the cylinder having skew '0', and determining whether the servo information is correctly written, wherein if errors do not occur in the cylinder at the predetermined distance from the cylinder having skew '0', track-defect-

Art Unit: 2627

processing all tracks within the predetermined distance from the cylinder having skew '0', such that a normal search operation cannot be performed, and if errors occur in the cylinder at the predetermined distance from the cylinder having skew '0', determining that all of the servo information is not correctly written, and writing the servo information for the entire disc again, which is neither disclosed or an obvious variation of the prior art.

Regarding claims 7-10, claim 7 discloses a method for writing and inspecting servo information on a disc in a disc drive comprising, writing servo information on a cylinder of the disc, inspecting the servo information written in the cylinder, wherein if an error occurs in the cylinder, determining whether the number of the cylinder in which the error occurs corresponds to a cylinder at a predetermined distance from a cylinder having skew '0'; if the number of the cylinder in which the error occurs corresponds to the cylinder at the predetermined distance from the cylinder having skew '0', determining that all of the servo information is not correctly written and writing the servo information for the entire disc again, and if not, track-defect-processing the cylinder in which the error occurs; and if all cylinders have been inspected, track-defect-processing all tracks within the predetermined distance from the cylinder having skew '0' such that normal search operation cannot be performed, which is neither disclosed or an obvious variation of the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2627

Response to Arguments


6. Applicant's arguments, see pages 10-15, filed December 29, 2006, with respect to rejection of claims 1, 3, 4, 6-11, 13, 16, 20-23, 25, 26, and 28 have been fully considered and are persuasive. The rejections of said claims have been withdrawn.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniell L. Negrón whose telephone number is 571-272-7559. The examiner can normally be reached on Monday-Friday (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DLN 
March 13, 2007


TAN DINH
PRIMARY EXAMINER

3/19/07